Belden



Product: 74011E

DataTuff® 6A, 4PR #23 Str BC, PO ins, S/FTP, PVC jkt, PROFINET Type B, AWM 20276

Product Description

DataTuff® 6A, 4 Pair AWG 23 Bare Copper - Stranded, Polyethylene insulation, S/FTP - Overall Braid / Individual Foil shielding, PVC jacket , PROFINET Type B, AWM 20276

Technical Specifications

Product Overview

Suitable Applications:	PROFINET Cat6A, harsh environment, IIoT, factory or process automation, IP cameras and devices, data communication, etc.

Construction Details

Conductor

Element	Size	Stranding	Material	No. of Pairs
Individual Shielded Pair	23 AWG	Stranded	BC - Bare Copper	4

Insulation

Element	Material	Nom. Insulation Diameter	Color Code
Individual Shielded Pair	PE - Polyethylene (Foam)	1.58 mm (0.0622 in)	White & Blue, White & Orange, White & Green, White & Brown

Cable Core

Description
4 pairs twisted to cable core

Inner Shield

Element	Shield Type	Material	Coverage
Individual Shielded Pair	Tape	Bi-Laminate (Alum+Poly)	100%

Inner Shield Table Notes:	Aluminum outside

Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	85%

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	8.7 mm (0.34 in)

Overall Cable Diameter (Nominal):	8.7 mm (0.34 in)

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
71.9 Ohm/km (21.9 Ohm/1000ft)	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

Delay

Max. Delay Skew	Nom. Velocity of Prop.
25 ns/100m	78%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. ELTCTL [dB]
1	2.1	75.3	73.2	70.2	68	20	35
4	3.8	66.3	62.5	59.5	56	23	23
10	5.9	60.3	54.4	51.4	48	25	15
16	7.5	57.2	49.8	46.8	43.9	25	10.9
31.2	10.5	52.9	42.4	39.4	38.1	23.6	5.1
62.5	15.0	48.4	33.4	30.4	32.1	21.5	
100	19.1	45.3	26.6	23.2	28.0	20.1	
125	21.5	43.8	22.3	19.3	26.1	19.4	
200	27.6	40.8	13.2	10.2	22.0	18	
250	31.1	39.3	8.3	5.3	20.0	17.3	
300	34.3	38.1	3.9	0.9	18.5	17.3	
500	45.3	34.8			14.0	17.3	

High Frequency Table Notes:	Limits below 4MHz are for information only
Transfer Impedance Class:	Grade 1
Screening Class:	Type I
Screening Table Notes:	Coupling Attenuation

Voltage

UL Voltage Rating	Voltage Rating
30 V RMS	30 V AC

Mechanical Characteristics

Temperature

Operating	Storage
-40°C to +80°C	-40°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
45 mm (1.8 in)	90 mm

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca, Indoor, Sunlight Resistance - Black only, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
AWM Compliance:	AWM 20276
Data Category:	Category 6A
ISO/IEC Compliance:	ISO/IEC 11801-1
CENELEC Compliance:	EN 50173-1, Segregation class according EN50174-2 = d
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark

History

Update and Revision:	Revision Number: 0.149 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
74011E.00B50	Green	Reel	50 m	8719605179814
74011E.00100	Green	Reel	100 m	8719605130044
74011E.00500	Green	Reel	500 m	8719605128607

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